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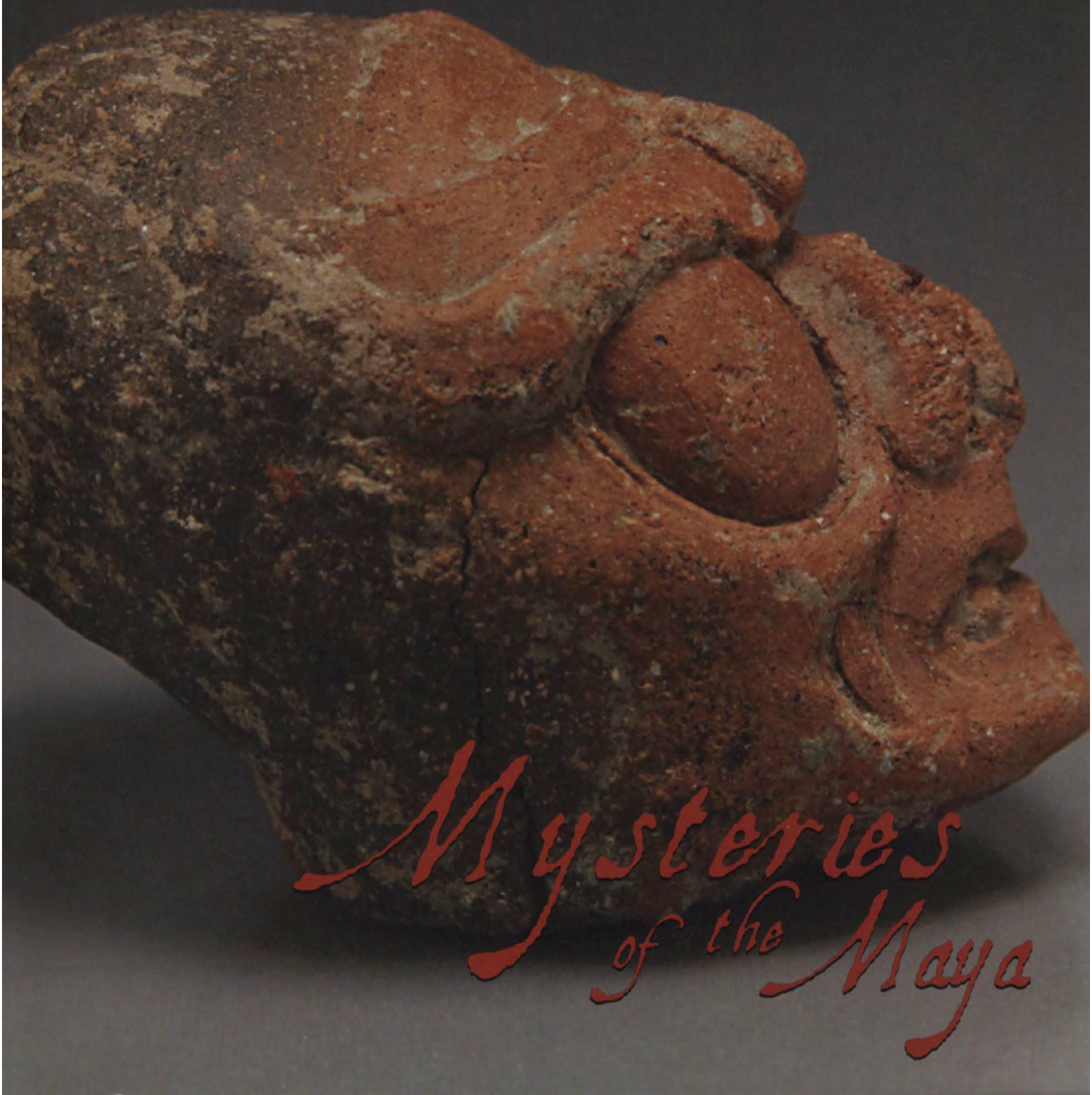
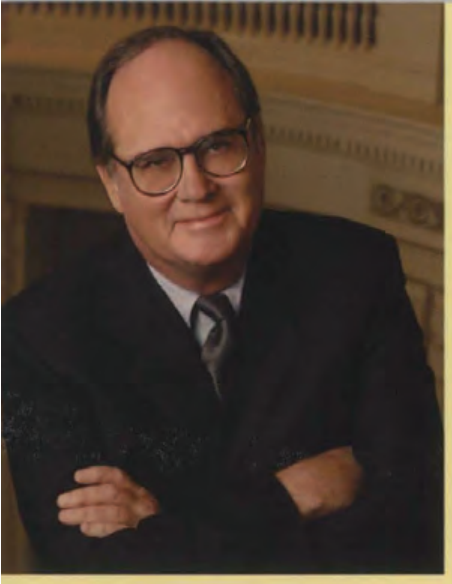


Mysteries of the Maya



Setting The Course For The Future Of SMU Research

As the new dean of Research and Graduate Studies, I am pleased to welcome you to another issue of *SMU Research*, an annual journal begun a dozen years ago by my predecessor, Dean U. Narayan Bhat.

Narayan, as many of you know, resigned as dean this past May and, after a year of leave working on some important research of his own, will retire from the University in June 2005. One of the most respected and effective deans on the campus, he is missed already.

We are hard at work building on his legacy. Fortunately, this is a good time for research and graduate studies at SMU. Our sponsored research volume jumped 30 percent this past year, from $13.7 million in 2003 to $19.7 million in 2004; as recently as 1995, it was only $7.7 million. New Ph.D. programs in chemistry and in civil engineering have come aboard. Above all, President R. Gerald Turner and the Board of Trustees are planning a major gifts campaign – known as the "Centennial Campaign" in honor of the upcoming 100th anniversary of SMU's founding. It will focus mainly on resources for research, endowed faculty appointments, scholarships, and academic programs. The prospects are exciting indeed.

Our achievements in research and graduate studies have been considerable; we are focusing on ambitious goals for the future. In the next few years we aim to increase dramatically our sponsored research; inaugurate new Ph.D. programs (in English, for example); increase the amount of graduate stipends to attract the most talented and diverse students; and boost the number of Ph.D. students we graduate each year. We plan, in short, to put in place measures that will move SMU ever higher in the ranks of the nation's prestigious research universities.

We have yet another goal, one of our most important: to establish ways to transfer our researchers' best discoveries into patented and marketable products, an accomplishment that can result in remarkable benefits. Technology transfer, as it is called, can use our faculty's research to improve lives and bring in extra revenue every year, which will reward our active researchers, the schools and departments that house them, and the University as a whole.

In research and graduate studies, SMU is poised for the next crucial steps that will enhance programs on our campus and gain recognition for our innovative research worldwide.

R. Hal Williams
Dean, Research and Graduate Studies

SMU RESEARCH
www.smu.edu/newsinfo/research

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The ancient Maya and their culture has drawn archaeologist and SMU professor David Freidel to the Yucatán and Central America for 30 years. The chronicle of his current dig in Guatemala begins on page 12.

RESEARCH

news

Reading Research Receives $3 Million Grant

SMU's Institute for Reading Research has received a $3 million grant to conduct research on reading interventions for students with mental retardation. The U.S. Department of Education has asked the nation's leading reading experts to conduct the first-ever study of literacy and the mentally retarded. Four universities – SMU, California-Berkeley, North Carolina-Chapel Hill, and Georgia State – are participating in the $12 million federal study.

The research will determine if techniques for teaching reading to children with reading difficulties apply to those with mild or moderate mental retardation. Researchers also will explore the levels of reading competence that these students can achieve.

The study will be conducted with 150 children in primary grades who have mild or moderate mental retardation. Children will receive either the special education program typically provided by the schools or an enhanced program that includes intensive reading intervention from highly trained teachers.

Observing The Battle Of The Brands

Raj Sethuraman wants to know why consumers will pay $3 for a box of Kellogg's Corn Flakes when a store's private label brand of corn flakes costs only $1.50. The associate professor of marketing in Cox School of Business conducts research on how and why consumers compare and choose national brand products versus store brands.

In a recent article in the *Review of Marketing Science*, he asks, "Why are consumers willing to pay a price premium for national brands even when they know that the quality of the national brands and the store brands are the same? Is it because of reputation, loyalty, experience, or simply habit?"

Sethuraman has developed an econometric model that measures brand equity and identifies factors that influence it. The model analyzes consumer survey data on 20 grocery product categories – from cereal and condiments to shampoo and toilet tissue. Grocery stores provide the perfect setting in which to study brand equity. Store brands or private labels in the United States have grown from $34 billion in 1994 to nearly $60 billion in 2002, outpacing national brand growth.

For more information: www.cox.smu.edu/article/research/research.do/71.

Working The Image

A new study shows that a U.S.-backed advertising campaign may have been successful in changing certain anti-American sentiments abroad, contrary to the federal government's decision to drop the ads because they were deemed ineffective.

SMU and Oklahoma State University researchers published the study, "Advertising as Public Diplomacy: Attitude Change Among International Audiences," in the *Journal of Advertising Research* (smu.edu/adamerica). After 9/11, advertising executive Charlotte Beers created the "Shared Values Initiative" campaign for the U.S. Department of State. Five television commercials depicted Muslim Americans living happily in the United States. Primarily aimed at women, the TV spots ran in countries with large Muslim populations. Print ads were produced as well.

Dismayed that the first American television advertising campaign to the Muslim world came and went without

much study, Alice Kendrick, professor at SMU's Temerlin Advertising Institute, and Jami A. Fullerton, OSU associate professor of advertising, tested the effectiveness of the ads. The study exposed 105 international students from 25 countries to the original TV spots. After viewing the commercials, overall positive attitudes toward the U.S. government and whether Muslims were treated fairly in the United States improved significantly.

"Advertising can be an effective tool in public diplomacy and should not be discounted as a strategy," Kendrick says.

J.C. Penney Archives Retail History

One of America's most renowned retailers has donated archives chronicling its 100-year history to SMU's DeGolyer Library. J.C. Penney Company Inc., headquartered in Plano, Texas, gave the materials to SMU to make them more accessible to the public.

"These significant and timeless materials will be valuable to those doing scholarly research, not only in the history of retailing but also in the broader field of American cultural studies," says Russell Martin, director of DeGolyer Library.

The collection comprises documents on the origin, growth, and operations of the J.C. Penney Company and more than 1,400 stores; more than 20,000 photos; advertisements from 1903 to late 1990s; and James Cash Penney's correspondence, among other items.

Penney opened his first store in Kemmerer, Wyoming, in 1902. He was the first retailer in America to charge all customers the same price for merchandise. By 1911, 22 stores operated mostly in small towns in Western states. Today, J.C. Penney is one of America's largest retailers with approximately 1,020 stores throughout the United States and Puerto Rico, and 61 Renner department stores in Brazil.

Partners In Education

In a partnership that will impact the quality of engineering education across the state, the Texas Engineering and Technical Consortium (TETC) will be housed at SMU's School of Engineering.

The partnership complements the mission of both organizations. TETC, a public and privately funded organization, represents Texas government, industry, and higher education. It was formed in 2001 by the Texas Legislature to increase the number of engineers. SMU's School of Engineering sponsors The Infinity Project, which promotes engineering education in grades K-12.

TETC's mission is to double the number of engineers and computer scientists graduating from public and private universities in the state in the next decade, substantially increasing the Texas high-tech workforce capabilities. Last year the state of Texas graduated only 3,378 new engineers.

TETC is expected to receive $15 million in state funding in the next biennium, which will be made available to colleges and universities in the form of grants. Some programs funded to date by TETC include the distribution of a high school engineering curriculum created by SMU faculty and a highly effective summer mentoring program for young engineering majors at the University of Houston.

SMU Engineering Dean Geoffrey C. Orsak says hosting TETC will allow the School of Engineering to utilize its expertise to help bring innovations to engineering education statewide. "With the persistent challenges of attracting a diverse and highly qualified workforce, the state needs an organization like TETC to ensure that we remain economically competitive in an increasingly technical economy."

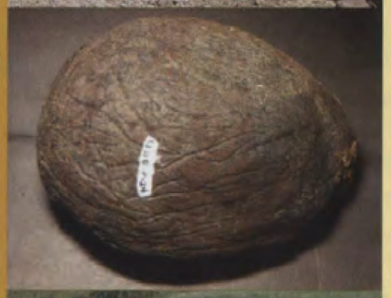
TETC works with 33 Texas colleges and universities and industry leaders such as Texas Instruments, Advanced Micro Devices, Applied Materials, National Instruments, Freescale, Hewlett-Packard, Intel, SBC, and Lockheed Martin.

The Latest In Business Research

The Cox School of Business has created a Web site that features faculty research papers on accounting, finance, economics, energy, entrepreneurship, marketing, management and organizations, strategy, and technology. For more information, visit the site at www.cox.smu.edu/article/research/research.do.

RESEARCHERS'

scrapbook



Carolyn Smith-Morris, Anthropology

For her fieldwork during the summer, Carolyn Smith-Morris conducts research among the Pima (Akimel O'odham) Indians of the Gila River Indian Community in southern Arizona. She explores the political-economic, historic, cultural, and genetic contributors to the tribe's epidemic of diabetes. Much like many other Americans' diets, she says, Pima diets are high in fat, salt, and carbohydrates. This contributes to excessive rates of obesity, elevated blood glucose, and other health problems. She is preparing a study to measure the relationship between psychological stress and disease, including diabetes and heart disease. Smith-Morris (top right) also teaches anthropology classes at SMU-in-Taos at Fort Burgwin in northern New Mexico. For more information about her research: www.smu.edu/anthro/faculty/cSmith-Morris/CSMorris.htm.

Bonnie Jacobs, Environmental Science

Paleobotanist Bonnie Jacobs (left center) conducts research on plant fossils in Ethiopia on the northwestern plateau in an area known as Chilga. In a multi-institution collaboration, scientists are documenting an ecosystem that existed 28 million years ago in interior tropical Afro-Arabia (the Arabian peninsula was connected to Africa at that time). The Chilga project includes researchers from SMU, UT-Austin, Washington University, University of Michigan, the USDA Forest Products Laboratory, and Addis Ababa University. In addition to Jacobs, the field crew from SMU that went to Ethiopia in December 2004 included Neil Tabor, Geological Sciences, and Aaron Pan (left bottom) and Juan Garcia Massini, paleobotany Ph.D. students. For more information about Jacobs' research: http://faculty.smu.edu/bjacobs/

note-worthy

Election Experts Central

During the presidential campaign last year, national media were interested in what SMU faculty had to say about issues surrounding Election 2004. They served as resources for members of the media seeking comments and insights up to and after election night November 2.

Their comments, featured in more than 100 media outlets, covered a wide range of issues, including political spin, voting behavior, ballot security, the Electoral College, exit polling, congressional races, voting rights, and past presidential elections. Because SMU's Election 2004 Web site received so many hits for information, it was named Google's number one site for experts on congressional races.

Professors who answered the media's calls included Cal Jillson, Political Science; Rita Kirk, Corporate Communications and Public Affairs; Thomas J. Knock, History; Robin Lovin, Theology; Marco Marchetti and Suku Nair, Computer Science; Ruth Morgan, Political Science; Tony Pederson, Journalism; Dennis Simon, Political Science; Harold Stanley, Geurin-Pettus Distinguished Chair in American Politics and Political Economy; Hal Williams, History; and Matthew Wilson, Political Science.

Friend Of Education

As a U.S. Senator, Kay Bailey Hutchison (R-Texas) looks for ways to strengthen education to keep the United States competitive in the global marketplace. During the past several years, she has been instrumental in securing federal grants to help fund research projects at SMU.

"Senator Hutchison has shown herself to be a true friend of education, especially in helping to secure resources for important research and academic programs," says SMU President R. Gerald Turner. "She knows that the strength of the United States will depend in many ways on the strength of our educational system."

SMU received $800,000 to launch the national Institute for Engineering Education, which develops innovative programs to encourage more U.S. students to pursue studies in engineering.

In addition, Hutchison helped secure a $1 million grant from NASA's Office of Biological and Physical Research for SMU's Department of Biological Sciences. The grant is providing support for new faculty members, laboratories for molecular biology research, and specialized equipment.

With Hutchison's support, SMU also received a $500,000 training grant for a program to prepare low-income preschoolers to learn to read and write in kindergarten. The grant from the U.S. Department of Education provides training for Dallas early childhood teachers in using the Language Enrichment Activities Program (LEAP) developed by SMU.


Senator Hutchison with a preschooler at the YWCA Metropolitan Dallas.

She also helped SMU's Dedman School of Law acquire the Rule of Law Forum, a partnership with the U.S. Department of State. Funded with three federal grants totaling $2.49 million, the Forum fosters international exchange among judicial, government, and business leaders from around the world and their U.S. counterparts.

Finally, Hutchison is assisting SMU's Archives of Women of the Southwest as honorary chair of the "Remember the Ladies" fund-raising campaign. Donors can honor women with special plaques in DeGolyer Library. The Archives supports research by chronicling women's roles in the Southwest.

Outstanding Scholarship

Five SMU faculty members, representing outstanding scholarship in diverse fields, received 2004 Gerald J. Ford Research Fellowships. The recipients were Michael A. Adler, associate professor of anthropology; Thomas M. Chen, associate professor of electrical engineering; Peter Beasecker, associate professor of art; Zhangxin John Chen, professor of mathematics; and Sherry L. Smith, professor of history. Each received $15,000 in research support.

In addition, Ford Early Career Research Fellowships are offered to help recruit faculty to campus. The first was granted in 2004 to Sheri Kunovich, assistant professor of sociology, one of 35 new tenure-track faculty who joined SMU last year.

The Ford Research Fellowships were established in 2002 through a $1 million pledge from Gerald Ford, chair of SMU's Board of Trustees, to help retain and reward outstanding scholars.

FACULTY profiles

Going With The Flow

The movement of aquatic life can appear inexplicable when viewed through the glass of an aquarium tank. But **Paul Krueger** believes the mechanics that jellyfish and squid use to maneuver can be applied to technology in the emerging field of "micro" vehicles.

Krueger, assistant professor of mechanical engineering, is studying a mechanical system – similar to that used by jellyfish and squid – to understand pulsatile propulsion and apply it to exotic engineering applications like micropropulsion. Krueger's research results eventually might propel tiny vehicles (sizes of a centimeter, millimeter, or smaller) used in microsurgery, create micro-submarines for undersea caverns exploration, or maneuver small aircraft for military surveillance.

"Small flight-capable or submersible vehicles are of great technological interest because their diminutive size permits increased portability and access to otherwise inaccessible locations," Krueger says.

Creating new propulsion schemes is "paramount to the design of micro vehicles because traditional propulsion designs, such as propellers and steady jets, become too inefficient at small scales," he says.

Krueger believes that pulsed jets – consisting of a series of jet pulses with no flow between them – is a promising approach to developing micropropulsion capability. He plans to develop a model system that propels itself using pulsed jets generated by a volume-displacement mechanism. The behavior of this representative vehicle will help reveal how to adapt pulsed jet propulsion for small-scale vehicles.

Krueger's research is being supported through a five-year, $400,000 Faculty Early Career Development award from the National Science Foundation (NSF), partially because of its multidisciplinary nature and potential for educating pre-college students. As part of the research, he is collaborating with a biologist who is an expert on squid biomechanics, enhancing cross-disciplinary efforts between the fields of biology and mechanical engineering.

Krueger also plans to incorporate the study of micropropulsion devices and its applications to biology, marine life, and medical applications into introductory material for mechanical engineering courses. "Illustrating applications of mechanical engineering in different fields may be a key factor in attracting new students from various backgrounds to study mechanical engineering," he says.

Krueger joined the SMU School of Engineering in 2002 after receiving his Ph.D. in aeronautics from the California Institute of Technology.

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Letters From A Late Bloomer

Poet Amy Clampitt became known relatively late in life – her verse did not gain a significant audience until she was 57, when she published her first book of poetry. Hughes Professor of English **Willard Spiegelman** has edited a collection of her letters that portray a woman who lived a "fiercely independent and intellectual life" long before she started writing poetry, he says.

Spiegelman compiled the collection using Clampitt's letters from New York to her friends and family in Iowa. The letters cover a 40-year span of the poet's life and chronicle her years as an editor, librarian, political activist, and traveler who spent her summers on the Maine coast.

Her ornate, highly complex poetry reflects these experiences, Spiegelman says. "Her poems often include natural descriptions and anecdotes about her travels. She also is one of the finest political poets of the 20th century."

Clampitt's first book of poetry, *The Kingfisher*, was published in 1983. She produced three other works, earning a MacArthur Foundation Fellowship in 1992 and membership in the American Academy of Arts and Letters.

Spiegelman edited the collection of letters as the first artist-in-residence at the Amy Clampitt home in Stockbridge, Massachusetts. "All her books were there, along with boxes of her memoirs and photographs," he says.

Spiegelman was acquainted with Clampitt before her death in 1994. As editor of SMU's literary journal, *Southwest Review*, Spiegelman had published her poetry, and his books about poetry were included in her library. But assembling Clamplitt's letters gave him new insight about her life.

His book *Love, Amy: The Selected Letters of Amy Clampitt* is scheduled for a June 2005 publication date from Columbia University Press. Spiegelman examines Clampitt's work as well as the work of other poets in *How Poets See the World: The Art of Description in Contemporary Poetry*, to be published by Oxford University Press in June.

Spiegelman, who joined the English faculty in 1971, has received numerous teaching awards as well as Guggenheim, Fulbright, and Rockefeller fellowships. Twenty-four of his lectures are included in "How to Read and Understand Poetry" on The Great Courses on Tape series. In addition, he is the author of *Wordsworth's Heroes, Majestic Indolence: English Romantic Poetry and the Work of Art*, and *The Didactic Muse: Scenes of Instruction in Contemporary American Poetry*. He earned his Ph.D. from Harvard University.

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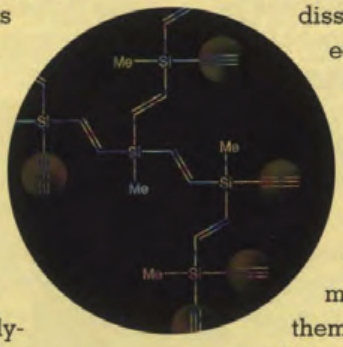
Branching Out

David Son uses some of the Earth's most common building blocks to create complex new materials with potential wide-ranging applications. He conducts research on polymers containing silicon, one of the main elements in the Earth's crust – and, as the major ingredient in common sand, also one of the most abundant and readily available.

"It's fairly easy and inexpensive to transform silicon into compounds we can manipulate," says Son, associate professor of chemistry in Dedman College. "And because silicon is an inorganic element, it gives materials great stability against temperature changes and oxidation."



Silicon-containing polymers might be used to create more heat-resistant and longer-lasting plastic materials than common organic polymers such as polyethylene or PVC, Son says. One example is the silicone ovenware widely available in stores. Pans made of silicon polymers are temperature-safe, naturally nonstick, and so flexible that they can be turned inside out to remove baked goods.

Most polymers are what chemists call the straight-chain type, with each molecule consisting of atoms laid more or less end-to-end. Son's research focuses on a new class of polymers called dendrimers (also known as "arborols" for their molecular resemblance to trees with many branches).

The dendrimers' structure gives them many advantages. "You can dissolve them much more easily in solvents," Son says. "Because the molecules are shaped like balls, they roll right over each other and don't get tangled up the way straight-chain polymers do, so you can use them as lubricants." Other possible uses include new drugs in which medicines are encapsulated in the dendrimers' branches, transported to targeted areas of the body, and then stimulated to release medication directly to those sites.

Most recently, Son has begun creating materials that merge metal ions with organic compounds called ligands. Ligands can be as simple as water or as complex as ethylenediaminetetraacetic acid (EDTA), a compound commonly used as an anticoagulant in medicine.

Son is especially interested in how nitrogen- and sulfur-based ligands bond with silver, gold, palladium, and platinum – elements with well-established catalytic properties. He hopes to create compounds that can be used to improve everything from optics to plastics manufacturing. Platinum and palladium compounds are used industrially to spark reactions in other materials. Creating better catalysts, Son says, could enable more efficient manufacturing processes – for example, at lower temperatures or with fewer defects.

Son received his Ph.D degree in organic chemistry from MIT and has conducted research at the Argonne National Laboratory and the Naval Research Laboratory.

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Virginia Dupuy (center) sings the role of Marmie in Fort Worth Opera's "Little Women."

Giving Voice To The Art Song

Mezzo soprano **Virginia Dupuy** is known as a champion of contemporary American music, particularly art song – the musical setting of a poem, letter, or other text. The professor of voice in Meadows School of the Arts became interested in the form during her first teaching job at Del Mar College in Corpus Christi. The school held an annual festival that brought to campus notable composers such as Ned Rorem and Alberto Ginastera, whose songs she performed.

"I loved being able to ask them why they did something a particular way," Dupuy says. "I learned to respect a composer's writing and learn as much as possible before performing it."

She made her first art song recording in 1990 – Dominick Argento's Pulitzer Prize-winning song cycle, "From the Diary of Virginia Woolf." She has made numerous other recordings of contemporary music, including "Voces Americanas" with Voices of Change, nominated for a 1999 Grammy Award.

In the mid-1990s Dupuy discovered three unpublished songs by modern American composers based on the poems and letters of Emily Dickinson. She investigated other settings of Dickinson's writings, and in 2001 received a University Research Council grant to expand her research. The result is the first comprehensive compilation of 3,000 settings of Dickinson's works for solo voice and chorus, composed from 1896 to 2003. In 2004 Dupuy and pianists Shields-Collins Bray, Tara Emerson, and William Jordan released a CD featuring 25 of these works, "Emily Dickinson in Song – Dwell in Possibility," on Gasparo Records. She now performs her Dickinson recital nationally.

With a demanding teaching and performing schedule, Dupuy has learned to make every moment count. In addition to a class in vocal techniques, she privately teaches 16 students, who recently performed with the opera companies of San Francisco and New York City and the symphonies of Dallas, Fort Worth, and Indianapolis.

Dupuy's own recent performances include the role of the mayor's wife in the Dallas Opera's critically acclaimed production of "Jenufa," in "Little Women" with the Fort Worth Opera, a recital in Albuquerque, with the Voices of Change and Broadway composer Ricki Ian Gordon at SMU, and at a Brahms festival at SMU in April. "It can take months to memorize songs and scores, so I'm rehearsing every day," she says.

Dupuy, who joined SMU in 1990, earned a Bachelor of Music degree from Southwestern University and a Master of Music degree from the University of Texas at Austin.

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Stop Me If I'm Repeating Myself

JOAN SHEANAN

Déjà vu – it is a discussion that seems familiar. But new findings show that people who travel frequently are more likely to experience déjà vu. Political liberals report more déjà vu experiences than conservatives do. And déjà vu becomes less common as people grow older.

Most of us have experienced déjà vu (which means in French "already seen"), yet few scientists have studied it. Understanding its causes, however, promises to explain other mysteries of the brain, says **Alan Brown**, professor of psychology in Dedman College and a leading researcher on memory.

"The community of research psychologists is largely silent on the topic, but findings from such research could expand our understanding of routine memory functions," he says.

According to Brown, many explanations for the déjà vu experience have been connected to the supernatural. In a new book, *The Déjà Vu Experience: Essays in Cognitive Psychology* (Psychology Press, 2004), Brown surveys scientific research as well as popular notions of déjà vu from the early 19th century.

From the scientific studies, Brown has identified common facts about déjà vu: • A majority of people experience déjà vu, roughly two-thirds of the population. • The frequency of déjà vu *decreases* with age and is most common among people ages 15 to 25. • People with higher incomes and more education have more déjà vu experiences. • Déjà vu appears to be associated with stress and fatigue. • Those who travel have more déjà vu experiences. • For some, déjà vu experiences appear to repeat prior dreams.

Although there are no definitive answers for what causes déjà vu, Brown offers four scientifically plausible possibilities: two cognitive processes become momentarily out of phase; a brief dysfunction in the brain, such as a seizure, or disruption in the speed of normal neuronal transmission; a memory that we forgot connects with part of the present experience; and an initial perception under distracted conditions is quickly followed by a second perception of the same thing under full attention.

Déjà vu research presents a unique challenge for Brown. "There is a thrill of examining something that seems to be on the fringes, then pulling it into the scientific realm," he says.

Brown, who joined the Psychology Department in 1974, is the author of four books, including *Maximizing Memory Power: Using Recall in Business.*

For more information: **abrown@smu.edu**
www.smu.edu/psychology/faculty/abrown.html

Taking Stock

How can the average investor take advantage of market data that only brokerage firms can afford to access? **Wayne Shaw** has an answer: Watch how the big teams play on opening day. Five years ago he wrote a paper demonstrating that on the first day of an initial public offering (IPO) he could separate firms by performance simply by tracking the first trade by an institution.

"Institutions have the money to collect information the rest of us don't have," says Shaw, the Helmut Sohmen Distinguished Professor of Corporate Governance in the Cox School of Business. "If they immediately sell a stock after it goes public, they're telling you there's something they don't like about it. If they buy more, they're showing that they do like it."

Now Shaw has taken that research to the next level: He has developed a mathematical win/loss model for IPOs that can separate the diamonds from the dogs even before the stock comes to the floor.

Originally, Shaw set out to build a model that would predict which firms would withdraw from the IPO process. He found that if the model predicts a company such as Texas Roadhouse – to use a real-life example – should not have gone public, its stocks consistently underperform the market. The model can pick the winners, too: Stocks it identifies as ripe for public offering, such as New River Pharmaceuticals, consistently perform at market levels.

Shaw's model is based entirely on publicly available data that includes the size of the offer, revenues and debt, initial price range, and whether the price was changed upward or downward. "It's all information that everyone is required to disclose as part of the process," he says. And the model, applied to 3,941 IPOs filed from 1995 to 2001, "worked exactly the same way each year in which we've tested it."

Keeping an eye on these factors can help individual investors avoid an IPO wasteland, Shaw says. "Many of these firms are not very healthy. People are trying to cash out, and some of them are misstating a company's future possibilities to get the highest price they can. The more you can observe from history, the better off you are."

Shaw, who received his Ph.D. degree in financial accounting from the University of Texas at Austin, joined SMU in 2003. He has worked with the Internal Revenue Service, taught at Cornell and the University of Colorado, and served as an expert witness for the Securities and Exchange Commission and various law firms.

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FACULTY profiles

Fostering Hope Among Black Teens

Growing up in southern Mississippi in the 1960s, **Evelyn Parker** clearly recalls life in a segregated world – from the "Colored Only" water fountain at Sears and Roebuck to her African American neighborhood "across the tracks" from downtown Hattiesburg.

Parker, associate professor of Christian education in Perkins School of Theology, joined her church and community in peacefully protesting injustices through boycotts, picket lines, marches – often galvanized by faith. "Prayers, songs, and sermons focused on the theme of hope – God making a way out of no way amidst the struggle for freedom and justice," states Parker in her book, *Trouble Don't Last Always: Emancipatory Hope Among African American Adolescents* (The Pilgrim Press, 2003).

Hope is a value that Parker finds consistently lacking among today's African American youth. In interviews with her they express faith in the "sweet by-and-by" of the afterlife, but they don't expect social change in the world, nor do they see themselves as agents of change, she says.

Segregation in the 20th century created alliances among African Americans who lived, worked, and served together toward a common goal of freedom, Parker says. "What had been a massive racial injustice is now a socioeconomic and sociopolitical injustice. African American youth today don't have a network of church, school, and home that fosters leadership and advocacy."

Parker has developed the concept of "emancipatory hope" as a framework for ministry with African American youth. "People who work with black teen-agers and who are interested in nurturing their spirits need to think seriously about hope – the expectation that God will change hopeless situations and that African American young people can participate in God's vision of transformation."

This spring Parker is training youth and adult leaders in "emancipatory hope" through partnerships with three Dallas churches that are historically African American. The training focuses on nurturing leadership in young people through worship, ministry, and community service.

"My goal is to involve young people in church worship and community service, as well as give them license to shape these areas," she says. "I want young people to see a connection between who they are in church and who they are in the community."

Parker plans to use this research to write another book of case studies that will provide a practical complement to *Trouble Don't Last Always*.

Parker, who earned her Ph.D. from Northwestern University, joined Perkins School of Theology in 1998.

For more information: **eparker@smu.edu**

Monitoring The Decision-Makers

In politics, whoever frames the issue best wins. **Valerie F. Hunt**, assistant professor of political science and an immigration scholar, studies how divisive issues are addressed in a democratic system. New political ideas attract new democratic institutions to the debate, she says, and thus access to more decision-makers – legislatures, the courts, or the executive branch.

America's immigration policy is experiencing similar boundary changes. When immigration policy was concerned with national origin, Congress held complete sway over who was allowed in and who was restricted, Hunt says. But because the policy has grown more complex with the introduction of variables such as economics, security, and border relationships, the locus of decision-making is now in flux. Courts have encroached upon congressional jurisdiction when immigration and immigrant policy is framed or understood as a matter of rights of persons, in particular, immigrants' rights.

"Immigration status of an individual can change quickly, and because it can, immigration status bucks up against Congress and the courts as to who should be the ultimate decision-maker," she says.

While living in California during the passage of Proposition 187, a controversial law that restricted some government services to undocumented workers and their families, Hunt became fascinated with the interplay between state legislatures, the courts, and the national legislative branch over immigration issues. She discovered that policy and legislative scholars in political science have largely ignored the way different government institutions shape U.S. immigration policy. This discovery led her to research the subject on public policy processes and inter-institutional dynamics. She is working on a book manuscript with the tentative title *Courts, Congress, and the Politics of U.S. Immigration Policy Reform.*

Hunt, who joined SMU in 2003, has served as a fellow of several national centers, most recently the Center for the Study of Democratic Politics in the Woodrow Wilson School of Public and International Affairs at Princeton University.

Conversant in Arabic, Hunt is an expert on Middle East affairs, in U.S. immigration, U.S.-Mexico relations, media and politics, and media strategies of political participants within the U.S. policy arena. Hunt received her Ph.D. in political science from the University of Washington.

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New Russian History

Russian historian **Dan Orlovsky** saw his field flourish after the fall of the Soviet empire 15 years ago, when the era of perestroika swung open the doors to archives previously off limits to researchers.

But Orlovsky is now seeing that access shrivel. Russian President Vladimir Putin has tightened his control on power, even more so since the recent escalation of terrorist attacks by separatists from Chechnya.

As a result, the general openness of the Gorbachev and Yeltsin eras is closing. "Access has been cut; information has been blocked," says Orlovsky, the George Bouhe Research Fellow in Russian Studies in the Clements Department of History.

Obtaining information may be more difficult for some scholars, especially those looking into political or military records, but the shifting winds at the Kremlin hardly will hinder those who study Russian history. In fact, the end of the Cold War indelibly changed the craft of writing the nation's history.

Before that time, the story of 20th-century Russia focused on Lenin, Stalin, and the concept of totalitarianism. In recent years, however, historians, while not abandoning the tyranny of dictators and their regimes, have uncovered complexities that provide a richer picture of the Soviet people, their culture, their government, and their work environment.

Orlovsky focuses on a group previously unrecognized by historians – white-collar employees and the professional class such as bookkeepers, engineers, journalists, and other educated workers who helped to run the Soviet state. This approach is a departure from the traditional model of government and society dominated by blue-collar workers.

"We were locked into a liberal, progressive, or Marxist interpretation, looking at workers and peasants, soldiers and sailors. We didn't add this other powerful dimension," he says.

He has spent 15 years on the subject while editing *Beyond Soviet Studies*. The time has proven invaluable for Orlovsky, who is writing a book on the white-collar class, because he was able to witness the revolution that dismantled the Soviet empire and replaced it with a democratically elected government in the late 1980s and early 1990s.

"It's helped a lot to have lived through a revolutionary era and to have witnessed attempts to build some kind of new society," he says.

Orlovsky, who earned his Ph.D. from Harvard, joined SMU in 1976. He also serves as co-director of SMU-in-Oxford. In addition, each May and June he conducts research in Moscow.

For more information: **dorlovsk@smu.edu**

MYSTER

IES Of The Maya

BY MEREDITH DICKENSON

Archaeologist Digs The Past, Preserves The Present In Guatemala

After **David Freidel** joined SMU's Anthropology faculty in 1974, a veteran in the department advised him that a successful archaeologist drew on his capacity to take risks when digging through the remnants of an ancient culture. He recalls that Fred Wendorf, now the Henderson Morrison Professor Emeritus of Anthropology, "told me that there is a need for courage in the field – that I would be working on the edges."

Freidel realized that to achieve his goals with each dig he had to engage the local citizens and governments in preserving their past and to create economic opportunities for them. In the intervening 30 years, the research has taken him to the jungles of Mexico and Central America to unearth the ruins of ancient Maya civilization, in areas that were sometimes risky and unsafe.

Today, Freidel, the University Distinguished Professor of Archaeology in Dedman College, co-directs an international archaeological project that is attempting to combine scientific research on the ancient Maya past of Guatemala with conservation of the country's tropical rainforest. The site of the dig, known from ancient Maya inscriptions as Waká and today as El Perú, is located in the middle of the rainforest in the area of Petén.

Waká was once an important economic and political center of the ancient Maya world. It formed one corner of a triangle of major sites that also included Calakmul (Mexico) to the north and Tikal to the east. The site, comprising 672 monumental structures and untold numbers of small house structures, sits atop an escarpment 6 kilometers north of the San Pedro Mártir River. Oil prospectors discovered the site in the 1960s. Harvard researcher Ian Graham recorded the site's monuments in the early 1970s but did not conduct any excavations. SMU is the first institution to undertake scientific excavations at Waká.

The Waká Archaeological Project is part of an alliance of government agencies, citizens, and conservationists trying to halt a cycle of destruction in Guatemala's largest national park, Laguna del Tigre, where Waká is located. The park, Central America's largest nature preserve, serves as a refuge for several endangered species, including the scarlet macaw, for which the park is one of the last remaining habitat zones. Cattle ranching, drug smugglers, and arsonists are encroaching on the park, however, and illegal activities that involve slash-and-burn agriculture and clearing for pastureland threaten the park's future. Last year 100,000 acres of the park burned, endangering the area's wildlife and cultural history.

The Waká project, together with the Government of Guatemala, the Wildlife Conservation Society, and ProPetén, is trying to save 230,000 acres of the park from deforestation. The organizations have formed the K'ante'el (Cahn-tay-elle) Alliance, which means "precious forest" in Maya and refers to the mystical place where the Maya Maize God was reborn and where the Maya believe their civilization began. The goal is preservation of the park and development of alternative sources of income for local communities that emphasize conservation of the park's rich natural and cultural resources.

"This is an initiative that can position archaeology, not only as scientific research, but as a useful activity for the community and the country in which we work," says project co-director and archaeologist Héctor Escobedo of Universidad de San Carlos de Guatemala. "Researching the site and learning its secrets are the first steps toward making a meaningful contribution to Petén, and to Guatemala as a whole."

Freidel and Escobedo are directing a team of Guatemalan, American, and Canadian archaeologists as they unearth the treasures of Waká. The site was inhabited as early as 500 B.C., but reached its peak between A.D. 400 and A.D. 800. At its height, the city may have been an economically and strategically important center, and home to tens of thousands of people. Over a period of 700 years, 22 kings ruled at Waká.

"We know a great deal about the ancient inhabitants of this site from their monuments," Freidel says. "The more than 40 carved monuments, or stelae, at the site chronicle the activities of Waká's rulers, including their rise to power, their conquests in war, and their deaths."

Excavations have focused on a number of significant areas, including a large ceremonial complex in the southeast portion of the site where evidence of extensive termination rituals may provide clues to events that occurred at the end of the site's life. At this location, SMU graduate student Olivia Farr found dozens of complete ceramic vessels, fragments, and human remains scattered in front of the building.

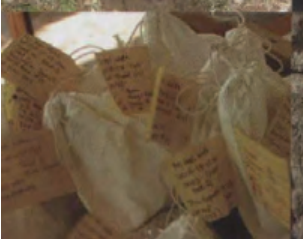
"This kind of termination is an act of desecration and

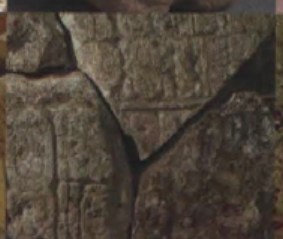
Over a period of 700 years,

22 kings ruled at Waká.

The interment contained artifacts of green

Three jewels that spell "Ik" in Maya, meaning breath or soul, were found underneath a pot placed on the stomach of a queen recently excavated from a burial chamber at Waká.





speaks to a violent event in the site's history," Freidel says.

Excavations also have delved into activity at residential compounds and at the main palace complex of the site, where at one time the rulers of Waká presided over the sprawling ancient city. The palace served as a place of residence, politics, trade, and governance, but evidence also indicates that the palace served another function – as a burial site. While conducting excavations in the palace complex to collect stratigraphic ceramic samples, Canadian archaeologist and SMU graduate student David Lee discovered a royal burial chamber. The burial contained remains identified as that of a female ruler or queen and more than 2,400 artifacts.

The individual was interred in a vaulted burial chamber that was built inside the shell of an existing building atop the palace acropolis. A preliminary analysis of the 23 complete vessels found in the chamber suggests a burial date estimated between A.D. 650 and A.D. 750. The interment, which contained artifacts of green stone, shell, and obsidian, provides significant information about the importance of this person during her life. The individual's royal status was identified by the presence of greenstone plaques that form a war helmet and of a carved royal jewel, or "huunal," that once may have been a part of this headdress. The woman buried in the chamber also had stingray spines placed on her body in the pelvic region. Stingray spines are bloodletting implements that are depicted being used to let blood from the genitalia of Maya kings.

stone, shell, and obsidian.

"That this female ruler had these implements supports the idea that in ancient Maya culture, gender roles were sometimes blended," Lee says.

Freidel and researchers hope that additional analysis will help shed light on the lives of the kings and queens of Waká. The project's 10 different research operations are focusing not only on the substantive hieroglyphic record at the site or on archaeological discoveries, but also on site conservation. Starting in 2003, the Waká Project began stabilizing, restoring, and reassembling buildings and monuments that have been disturbed in the hundreds of years since the site's abandonment in the ninth century.

"One of our most ambitious projects has been the stabilization of an 18-meter temple pyramid that was structurally undermined by looting," Freidel says.

Under the direction of Guatemalan archaeologists, a team of masons has worked to consolidate the structure so that scientific excavations can proceed. In addition, Guatemalan specialists have reassembled the fragments of broken stelae and copied them using latex molds to create fiberglass replicas. "We see it as our obligation," Escobedo says, "not only to retrieve the archaeological information that this site has to offer, but to preserve it for future generations."

Once an important center of political, social, and economic activity, Waká is once again at a strategically important crossroads, central to the efforts of the K'ante'el Alliance to save this important site, and the national park it resides in, from destruction.

"The future of this area," Freidel says, "will depend on our ability to do what the Maya did here: establish a stable system for managing this area, protect it from threats as they may come, and establish an economy that will see it survive into the future."

Freidel, author of numerous books and articles on the ancient Maya, recently completed a manuscript titled *Flintshield* that attempts to understand the presence of warfare that occurred throughout the ancient Maya civilization. "Through the book I try to explain why the Maya fought unceasing wars that eventually damaged their economy and precipitated their collapse," he says.

In an article for *The Dallas Morning News* (February 19, 2005), Freidel wrote about the lessons he has learned from 30 years of conducting research on the ancient Maya and how they apply today.

"The Maya created one of the world's great civilizations in the middle of a tropical forest environment," he said. "They were ingenious farmers who managed to produce vast quantities of staple foods like maize and beans while also growing enough cacao (chocolate) and cotton to support wealthy and cosmopolitan cities.

"They were no saints. They cut down vast tracts of trees for charcoal to manufacture lime plaster to cover their majestic palaces, temples, and plazas in gleaming white and red.

"After a thousand years of pre-Columbian civilization, the Petén rainforest likely survived as precious royal parks. ... But around 760, the Maya world in the Petén started to collapse.

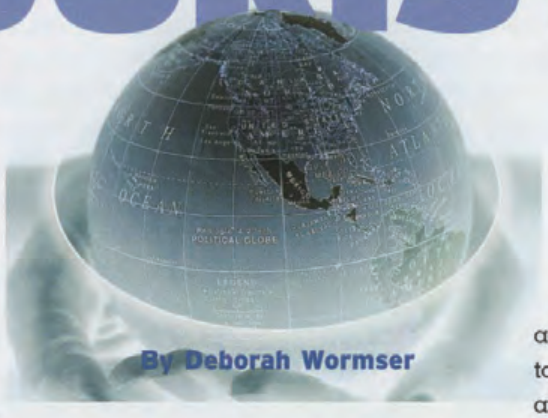
"Within a century most of the great cities were depopulated. By 950, classic Maya civilization was, for all intents and purposes, dead; the forest began reclaiming its territory.

"The Maya people survived, and today they number in the millions again. Some of them work with me excavating the ruins of El Perú-Waká, trying to figure out why the world of their ancestors collapsed.

"War, environmental degradation – the likely reasons are depressingly familiar."

Freidel returned to Guatemala this spring to conduct a fourth season of site excavations at Waká. For more information and images from the site, visit smu.edu/waka.

THE GLOBAL JURIST



By Deborah Wormser

Law Dean Serves As Conduit For International Dialogue

SMU Dedman School of Law **Dean John B. Attanasio** thinks locally but acts globally, a combination that is positioning the University as a magnet for international thought.

A rare specialist in both U.S. constitutional and international law, Attanasio has worked with legislative and judicial officials in emerging democracies in the former Soviet Union and Eastern Europe. He brings these real-life experiences to the law quad through regular conferences, international lecturers, and stimulating debates.

His efforts at SMU, he says, are aided greatly by the caliber of the faculty, which includes eminent scholars such as Joseph Jude Norton, recently awarded an honorary doctorate by the University of Stockholm for his work with the International Monetary Fund.

Attanasio and Norton have edited a book, due out this spring, based on SMU's 2002 Carrington Lecture on "Responding to Global Threats: The Cases for Unilateralism and Multilateralism" in trade, military, and judicial situations. Several SMU faculty members and students contributed to the book, with the dean writing a chapter on multilateralism, unilateralism, and leadership. "The issue is to what extent countries should be multilateral or unilateral," Attanasio says. "All countries are both at given times and with different issues."

He cites the Beslan tragedy in Russia as a specific example of how multilateralism and unilateralism affect the lives of average people. In reaction to terrorists who took over a school in the town of Beslan and killed more than 350 adults and children, the Russian president stated that his government would pursue terrorists wherever they are in the world, "basically on a unilateralist basis," Attanasio says.

The tension between international cooperation and pursing one's own national interest is a universal problem, and that is where the leadership comes in, he says. "If the United States is going to be a leader, how should it exercise that leadership? It seems to require a careful blend of cooperation with other nations and striking out on new paths of its own."

Although some observers might define leadership as the ability to go against the flow, that is not necessarily a good thing, Attanasio says. "In many cases it can be in one's national interest to cooperate. In the United States' case, I discussed in the book the relationship of all that to leadership because we have the mantle of world leadership."

Attanasio also observes how judicial leadership operates at the national level. He recalls the June 2003 Supreme Court decision on a case from the University of Michigan that essentially upheld affirmative action but stopped short of endorsing racial quotas, which will have a direct effect on leadership throughout the Southwest.

"Because universities like SMU play a role in training future leaders, if the Supreme Court ruling makes it easier to admit minority students, it means that the leadership of our society will be more diverse," he says.

For many outside the field, the image of lawyers is one of adversaries. Attanasio's approach, however, is to create an environment of trust in which people with different views can discuss new ideas.

"I'm part of a much larger process" he says. "I regard my role as academic. I'm not here to provide formulas or solutions, but to advance a discourse and an exchange of ideas with all people, not just academics. I like the give-and-take."

Attanasio's work at SMU has given him numerous opportunities for such exchanges. One of the programs he is most excited about is the Rule of Law Forum, a partnership with the U.S. Department of State, funded with three federal grants totaling $2.49 million, to foster international exchange between judicial, government, and business leaders from around the world and their U.S. counterparts. He credits U.S. Senator Kay Bailey Hutchison (R-Texas) as the driving force behind bringing the program to SMU.

Other forums he has arranged include the first U.S. visit of five justices from the Russian Constitutional Court. Attanasio arranged meetings between them and justices of the U.S. Supreme Court, including Chief Justice William Rehnquist and Justices Sandra Day O'Connor, Antonin Scalia, and Anthony Kennedy. With New York University School of Law Dean John Sexton, Attanasio arranged two summits that brought together members of the Supreme Court and constitutional courts of Russia, Germany, and Italy. In addition, he has brought distinguished visiting professors to Dedman Law School, including leading jurists such as Justices Yvonne Mokgoro and Pius Langa of the South African Constitutional Court.

U.S. Supeme Court Justice Sandra Day O'Connor participates on a panel at SMU with Dedman Law Dean John Attanasio.

The dean acknowledges that the Supreme Court has been criticized by some in this country for mentioning European court opinions in recent U.S. opinions, but Attanasio says he thinks doing so is part of exercising the world leadership mantle that has been thrust upon the United States.

"If you want to exercise a leadership role in the spreading of the rule of law to different parts of the world, it would be curious if we claimed that other countries should listen to us, but we shouldn't listen to anyone else," he says. "I think it would be difficult for us to sustain a leadership role if we take that attitude."

Another subject near to Attanasio's heart: providing support and dialogue to strengthen the U.S. judiciary. The dean was instrumental in the selection of SMU to serve as headquarters for the Appellate Judges Educational Institute, which organizes continuing education programs for appellate judges and lawyers.

"Judges in the United States are frightfully underpaid and these are not just federal judges, but state judges in particular," he says, adding that some new SMU law school graduates make more than a justice on the Texas Supreme Court ($113,000 per year).

Added to the pay challenge is the problem of judicial independence with encroachments from both Democrats and Republicans, Attanasio says. On the federal level, politicians have tried to get judges to predecide cases as part of their selection process, while at the state level judicial elections have become more political.

The expected replacement of Chief Justice William Rehnquist also could take a toll on the judiciary, he says.

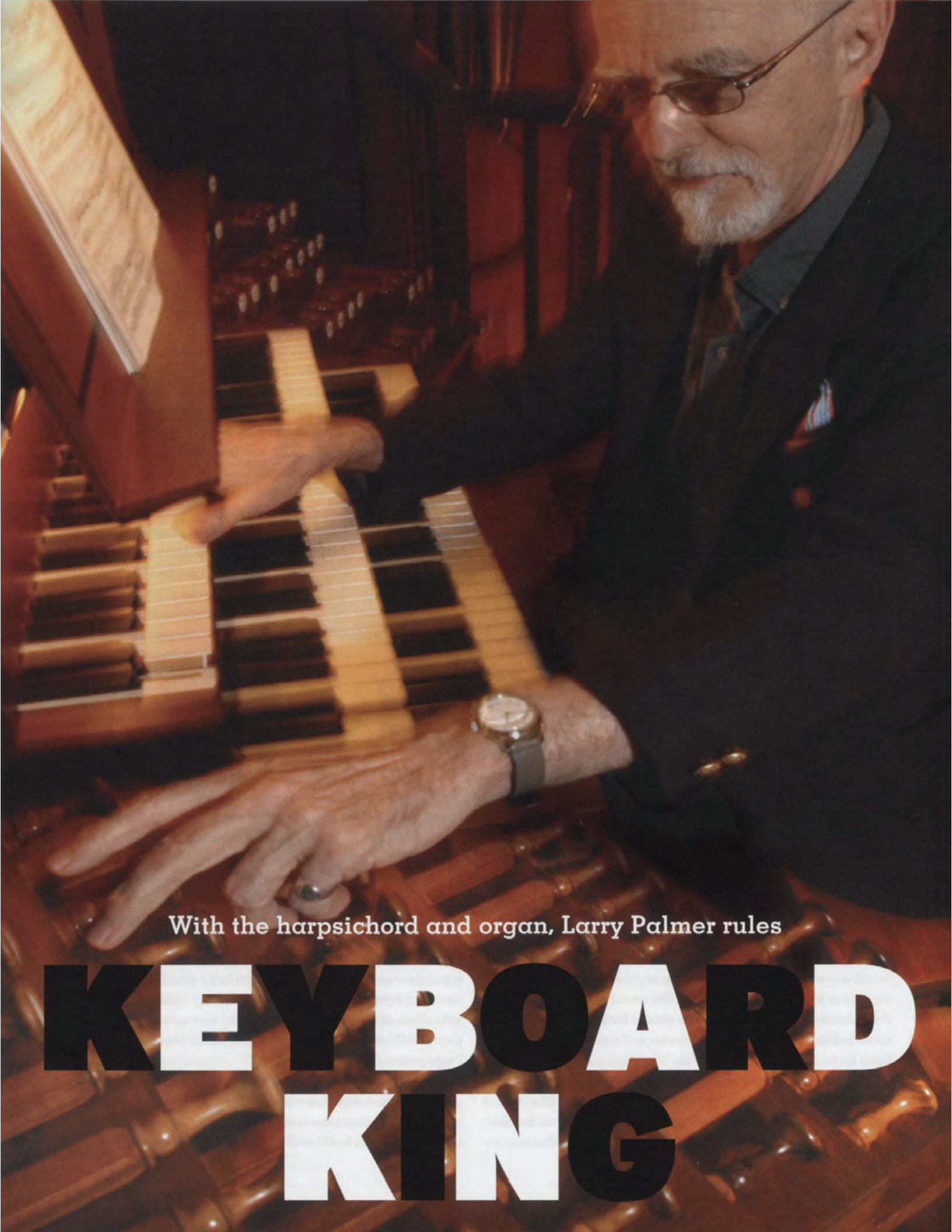
"The last few debates about the Supreme Court have been very intense. I think those debates are not costless. What it means is that a lot of very good people have left the judiciary of the United States, and that imposes real threats to the rule of law," he says.

Attanasio traces his constitutional focus to a happy accident in his student days at New York University School of Law. He was scanning the bulletin board for job postings when Dean Norman Redlich asked if Attanasio would like to be considered for a stint as the dean's research assistant.

"I thought, boy, would I. I was eager," Attanasio recalls. The job involved helping Redlich complete a casebook, a tightly edited compilation of cases from the U.S. Supreme Court. Within 10 years Attanasio became a co-author of the casebook, now entering its fourth edition and used by law schools across the country.

After coursework at NYU and Yale, Attanasio earned a degree in comparative law from Oxford University. He taught courses on constitutional law in Russia as a Fulbright professor in 1990 and served as the John M. Regan Jr. professor of law and director of the Joan B. Kroc Institute for International Peace Studies at the University of Notre Dame. He was dean of the St. Louis University law school before coming to SMU, where he is also the William Hawley Atwell Professor of Constitutional Law.

"Dedman School of Law has the makings of the great global law schools that are able to focus debates on issues and events around the world," he says. "Such an institution is a tremendous asset to SMU and the Dallas area."



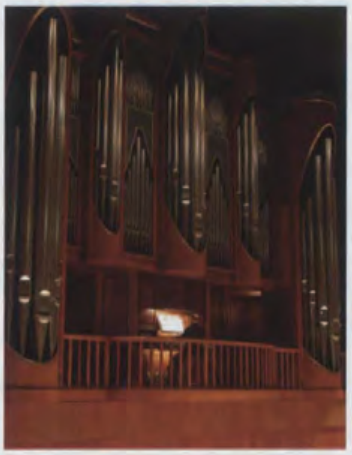
With the harpsichord and organ, Larry Palmer rules

KEYBOARD KING

BY SUSAN WHITE

For many contemporary music lovers, the harpsichord can seem quaint and antiquated, forever associated with the Baroque sounds of Bach, Couperin, and Scarlatti. But musician Larry Palmer relishes that even 20th-century jazz masters Erroll Garner and Duke Ellington (who performed under Palmer's baton during a 1968 concert) wrote pieces that incorporated the instrument, which reached its golden years of musical repertoire in the 17th and 18th centuries. And use of the harpsichord in the 1951 popular tune "Come On-A My House," sung by Rosemary Clooney, guaranteed its being heard over the airwaves.

For more than 40 years, Palmer, professor of harpsichord and organ in Meadows School of the Arts, has observed a resurgence of the public's interest in the harpsichord. He wrote about the revival of what had been regarded as an instrument for the parlor in *Harpsichord in America: A Twentieth-Century Revival* (1989, 1993). In the book's preface, he attributes the renewed interest to "an intrepid band of dreamers – men and women, some academic, some temperamental, some frankly quite mad – all determined that their chosen instrument should live again to make music."



Palmer believes that a combination of factors led to its reappearance – including a growing interest in performing Baroque music on appropriate period instruments, more American musicians receiving their training and education in Europe following World War II, and an increasingly historical emphasis in the craft of making harpsichords. Palmer himself benefited from musical training in Europe. An organ major at Oberlin College in the late 1950s, he recalls that "I had no intention of studying the harpsichord; I was too busy trying to catch up with my peers in learning how to play the organ." A required junior year abroad for all Oberlin music majors changed his mind.

Oberlin harpsichord students attending the Salzburg Mozarteum in Austria in 1958 were taught by Isolde Ahlgrimm, an internationally renowned Viennese harpsichordist. Palmer says he fell in love with her and with the harpsichord because of its "exciting repertory." Student and teacher remained lifelong friends until Ahlgrimm's death in 1995.

After graduating from Oberlin in 1960, Palmer continued his studies in organ and church music at the prestigious Eastman School of Music at the University of Rochester, earning his Master's and doctoral degrees. He also studied under the great Dutch harpsichordist Gustav Leonhardt, who had taught James Tallis, the faculty member who began SMU's graduate program in harpsichord in 1968. (SMU conferred an honorary doctorate on Leonhardt in 1983.)

After Tallis' death in 1969, Palmer was hired to continue the program. From 1971, when the first Master's degree was awarded, to 1996 nearly 30 graduate degrees in harpsichord were granted by SMU. During these years, Palmer taught harpsichord to as many as 14 students and organ to as many as 10 during each semester. He also organized annual summer workshops at SMU-in-Taos and in France and London.

Although fewer students specialize in the harpsichord and organ today, some continue to study and perform while majoring in other subjects, in large part because of the economy. "Not many are able to earn a living playing the harpsichord as their main source of income," he says. Palmer observes that many keyboard musicians now turn to careers in the computer industry because the skills required are quite similar.

Teaching has been only one part of Palmer's career at the keyboards. He served as organist-choirmaster for several Dallas churches until the 1990s, and continues to do "a fair amount of substituting at various places," he says. He also presents numerous concerts at SMU and in the Dallas area each year, as well as playing nationally and, occasionally, internationally. Last fall he performed with the Meadows Symphony the "Concerto for Harpsichord and Strings" by longtime composer and friend Gerald Near, who had written the work for Palmer to play at the 1980 national convention of the American Guild of Organists. Most recently Palmer celebrated Bach's birthday (March 21) with a performance in the Meadows Museum.

Palmer, who owns six harpsichords, also is known for his commitment to commissioning and performing new works for the harpsichord and organ. "Involving composers in our performing lives is one of the most rewarding actions we can take," he wrote for *The Diapason*, for which he has served as harpsichord contributing editor since 1969. "For us, it provides the excitement of adding new pieces to our repertoire; for them, it is an affirmation of their necessary contributions to the ongoing vitality of our art."

His discography includes *A Recital of 17th and 18th Century Harpsichord Music* and *Dedication Recital: Fisk Organ Opus 101*, featuring the organ in SMU's Caruth Auditorium first played in concerts in fall 1993. He also is the author of *Hugo Distler and His Church Music* (1967), the first English-language book about the influential German composer who died in 1942.

In college, Palmer, who also played the oboe, had to choose between the keyboards and the reed instrument. Reflecting on that decision nearly 50 years later, "I don't think I made the wrong choice," he says.

PORTRAIT OF AN artist

For **Charles DeBus**, the darkroom, not the camera, is what photography is all about, even in the digital age. He seldom uses a digital camera, and shoots only black and white because "it allows me a tremendous number of interpretive capabilities," DeBus says. The artist incorporates a painterly approach to his subjects – landscape, figure, or still life – utilizing many different processes, including gelatin silver, platinum, gum bichromate, and Iris prints. "My images are metaphors, visual statements about things that I feel very deeply. Making images allows me a more intimate understanding of life," he says. The senior lecturer in photography at Meadows School of the Arts, who earned a B.F.A. from the University of Dallas, studied with renowned photographers Ansel Adams, Wynn Bullock, Imogen Cunningham, Robert Heinecken, and Jerry Uelsmann. He was a stringer for the wire services and a commercial photographer, but since the 1960s has concentrated on photography as art and teaching. DeBus' work, which is included in numerous private and public collections, can be viewed at www.crowabbeyworkshop.com.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THIS PAGE:

a As I Looked Up One Winter's Night, 2000, hand-colored cyanotype

b Magnolia, 2004, gum bichromate print

c Cibolo Creek, 2000, gelatin silver print

d Untitled, 2004, gum bichromate print

OPPOSITE: Portrait of Charles DeBus by Naletta DeBus

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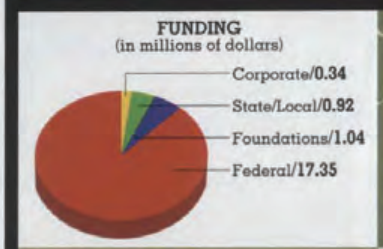

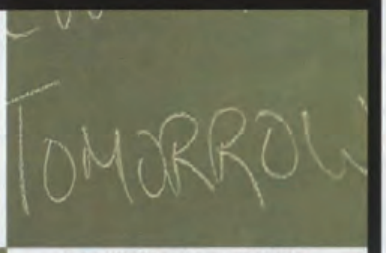

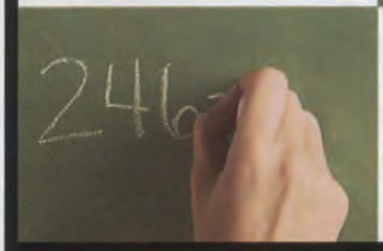

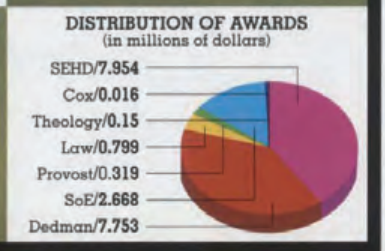

Compiled by Larry Smith,
Director of Research Administration
and Technology Management

In fiscal year 2003-04, sponsors awarded $19,658,689 to SMU for direct and indirect costs of research and sponsored projects. The total is a marked increase compared with funding awarded in previous years: $13,752,118 in 2002-03 and $11,010,791 in 2001-02.

Funding sources for the $19,658,689 were: federal agencies, $17,353,629 (88.27 percent); foundations, $1,043,909 (5.31 percent); state and local government agencies, $921,034 (4.69 percent); and corporations, $340,117 (1.73 percent).

Schools and divisions that received funding were Dedman College, $7,752,800 in 58 awards; the School of Engineering, $2,667,940 in 30 awards; and the School of Education and Human Development (SEHD), $7,953,868 in 12 awards. Receiving one award each were Dedman School of Law, $799,134; Perkins School of Theology, $150,000; and Cox School of Business, $15,947. Nonacademic departments reporting to the Provost Office received eight awards for a total of $319,000.

Of the 69 project directors/investigators, 32 received $100,000 or more in aggregate funding as lead investigators. They are listed in alphabetical order:

Vladimir Ajaev, Mathematics, "Collaborative Research: Fundamental Studies of Vapor-Liquid Interfaces with Phase Change in Microdevices," National Science Foundation (NSF).

John Attanasio, Law, "Rule of Law Forum," U.S. Department of State.

U. Narayan Bhat, Research and Graduate Studies, "Graduate Research Fellowship Program," NSF.

David Blackwell, Geological Sciences, "Application of Thermal Techniques for Exploration, Evaluation, and Assessment of Geothermal Resources," Department of Energy; "Synthesis of Dixie Valley and Great Basin Data," Bechtel BWXT Idaho, LLC (BBWI).

Mary Brouillette, Theology, "Theological Programs for High School Youth Sustainability Program," Lilly Endowment Inc.

John Buynak, Chemistry, "Library Synthesis Targeting Resistant Bacteria," Department of Health and Human Services; "Design and Synthesis of Small Molecule Inhibitors of Medicinally Important Enzymes," The Welch Foundation.

Nell Carvell, Learning Therapy, "Child Care Training," Dallas County Local Workforce Development Board.

Marc Christensen, Electrical Engineering, "The Role of Integrated Micro-Laser Array Technology in Future Autonomous and Networked Battlefield Sensors," Army.

Marc Christensen and **Dinesh Rajan**, Electrical Engineering, "Analysis of Irregular Sampling for Information Efficient Sensors," Defense Advanced Research Projects Agency.

Marc Christensen and **Betsy Willis**, Electrical Engineering, "Rewarding Achievement and Promoting Success: Strategic Support to Foster Tomorrow's Diverse Engineers," NSF.

Deborah Diffily and **Patricia Mathes**, Institute for Reading Research, "An Empirical Evaluation of the LEAP Curriculum," Texas Instruments Foundation.

Margaret Dunham, Computer Science and Engineering, "Collaborative Research in DAta in Your Space (DAYS)," NSF.

Hesham El-Rewini, Computer Science and Engineering, "Partnership Between SMU and ITESM Campus Monterrey (Monterrey Tech) in Information Technologies with Emphasis on Software Engineering," U.S. Department of State; "Partnership Between SMU and the University of Tunis el Manar (UTM) in Information and Communication Technology," USAID; "Scholarship for Talvar Gholar," The David and Lucile Packard Foundation.

Gary Evans, Electrical Engineering, "Grating Fabrication for Corrugated Polymer OptoElectronic Technologies," Louisiana Board of Regents.

Gary Evans and **Jerome Butler**, Electrical Engineering, "Commercialization of High-Energy Efficiency Grating-Outcoupled Surface-Emitting Semiconductor Lasers," Texas Higher Education Coordinating Board; "Photonic Device Development," Xinmau Investment Company.

Richard Gunst and **William Schucany**, Statistical Science, "Gulf War Illness Research Program," Department of Defense; "A Project to Investigate Innovative Ways of Analyzing Neuro-imaging Data and Associated Records of Human Subjects (UTSouthwestern/USAMRAA/DOD)," U.S. Department of Defense.

Christopher Hayward, Geological Sciences, "Design, Implementation, and Installation of a Seismic Array for Detection and Characterization of Ambient Noise Fields and Man-made Signals at Near Ranges," Army; "Synergistic Study of Collocated Seismic and Infrasonic Arrays," Army.

Eugene Herrin and **Paul Golden**, Geological Sciences, "Operation and Maintenance of the TXAR Array," Air Force; "Regarding Efforts Required to Begin the Installation Phase for Infrasound Array 160US," Army; "The Operation and Maintenance of Three IMS Primary Seismic Arrays," Comprehensive Test Ban Treaty Organization (CTBTO); "Regarding Efforts Required to Begin the Installation Phase for Infrasound Army 160US," CTBTO.

Yildirim Hurmuzlu, Mechanical Engineering, "Production of an Ultrasound Base Multiphase Flow Meter – Phase III," ARAMCO Services Company.

Richard Jones, Biological Sciences, "Polycomb-Group Genes and Gene Regulation (Yr. 11)," National Institutes of Health.

Ernest Jouriles and **Renee McDonald**, Psychology, "Domestic Violence and Child Aggression," National Institutes of Health.

Jeffery Kennington, Engineering Management, Information, and Systems, "Improving Scheduling Procedures for SST Truck Company, LLC," SST Truck Company, LLC.

Jeffery Kennington and **Eli Olinick**, EMIS, "Optimization-Based Design Strategies for DWDM Networks" and "Opaque Versus All-Optical Networks," Department of Navy.

Radovan Kovacevic, Mechanical Engineering, "Development of Rapid Manufacturing Equipment for Research, Training, and Education," NSF; AWS Graduate Fellowship Grant (D. Jandric), American Welding Society; "Development of Rapid Manufacturing Equipment for Research, Training, and Education (Teacher Supplement to Project #G000600)," NSF; "Development of Information Systems for Hybrid Rapid Manufacturing Process – RET Supplement," Texas Higher Education Coordinating Board.

Choon Sae Lee, Electrical Engineering, "Window Antenna for Satellite Communications," Texas Higher Education Coordinating Board.

John Maguire, Chemistry, "A Study of Syntheses, Structures, and Reactivities of Metallacarboranes with Constrained Geometries," The Welch Foundation;

Patricia Mathes, Institute for Reading Research, "Interagency Education Research Initiative," Department of Education; "NCEE-English Language Acquisition Evaluation Research Program (Project ELLA)," Department of Education; "Oracy/Literacy Development in Spanish Speaking Children (University of Houston/NICHD)," National Institutes of Health.

William Orr, Biological Sciences, "Thioredoxin Peroxidases, Oxidative Stress, and Aging," National Institutes of Health; "Glutathione, Oxidative Stress, and Aging," National Institutes of Health; Cellular Aging and Oxygen-Free Radicals (USC lead)," National Institutes of Health; "Protein Targets of Oxidative Damage During Aging," National Institutes of Health.

Geoffrey Orsak, Electrical Engineering, "Infinity-Digital Signal Processing Curriculum Development," Texas Instruments Inc.; "Launching the Texas Engineering Education Pipeline: Deploying The Infinity Project Statewide," Texas Higher Education Coordinating Board.

Geoffrey Orsak and **Michael Acosta**, Electrical Engineering, "Science Summer Camp," Dallas Independent School District; "Mathematics Summer Camp," NSF.

William Pulte, Education, "Master's Program in Bilingual Education with Gifted and Talented Focus," Department of Education; "Supplemental Certification in Bilingual Education," Department of Education; "Bilingual Education – Professional Development," Department of Education.

Ne'Shaun Robinson-Jones, Pre-College Programs, "Upward Bound Program," Department of Education.

Lawrence Ruben, Biological Sciences, "TRACK Regulates Cytokinesis in Trypanosoma brucei," National Institutes of Health.

Ryszard Stroynowski, Physics, "The U.S. Atlas Research Program: Empowering U.S. Universities for Discoveries at the Energy Frontier," NSF; "G-Link System," Brookhaven Science Associates, LLC; "High-energy Physics – Theory (travel funds for Dr. Yongsheng Gao)," Department of Energy.

Ryszard Stroynowski and **Jingbo Ye**, Physics, "Acquisition of Instrumentation for Radiation Hard Optical Electronics Design and Testing," NSF; "High-speed Optical Sources for High-energy Physics Data Acquisition (Photodigm, Inc.)," U.S. Department of Energy.

Brian Stump, Geological Sciences, "Calibration of Source and Propagation Path Effects In and Around the Korean Peninsula," Defense Threat Reduction Agency (DTRA); "Regional Geophysical Discrimination Support Multiple Arrays," Air Force; "Test and Physical Evaluation of an Integrated Suite of Discriminants in Mining Regions in the United States and Russia," Department of Energy; "A Comparative Study of Natural and Man-induced Seismicity in the Yanqing-Huailai Basin and the Haicheng Area, China," DTRA; "Development of a New Seismo-Acoustic Array Element," Air Force.

Stephen Szygenda, Computer Science and Engineering, "An Integrated Approach for Circuit Design Validation," Texas Higher Education Coordinating Board.

Steven Vik, Biological Sciences, "Quinone Binding Sites in Complex I and Their Possible Role in Disease," American Heart Association Inc.; "Interactions of Membrane Proteins," The Welch Foundation.

Patty Wisian-Neilson, Chemistry, "Cyclic Alkyl/Aryl Substituted Phosphazenes: Functional Molecules with Specific Shape and Directionality," The Welch Foundation; "Cyclic Phosphazenes," The Welch Foundation.

FACULTY recognition

(Clockwise from top left) Kathleen Wellman, U. Narayan Bhat, Jamie Clark-Soles, Simon Sargon, Geoffrey Orsak, and Caroline Bretteli are among numerous SMU faculty members who have been recognized for research, teaching, and leadership in their fields.

Peter Bakewell, History, has published the second edition of *The History of Latin America: 1450 to the Present* (Blackwell Publishing, 2004).

Carolyn Barta, Journalism, received the 2004 First Amendment Award for Opinion Writing from the Fort Worth Chapter of the Society of Professional Journalists for an editorial published in *The Dallas Morning News*, "Let the Sun Shine: Texas Legislature needs to record votes."

U. Narayan Bhat, Engineering Management, Information, and Systems, received the 2004 Informs Fellow Award, which recognizes outstanding contributions, achievements, and service that have advanced the profession of operations research and the management sciences.

David D. Blackwell, Geological Sciences, received the GRC Special Achievement Award at the Geothermal Resources Council 2004 meeting for his outstanding achievements in geothermal heat flow studies.

Caroline Brettell, Anthropology, co-chaired the final International Migration Fellows Program of the Social Science Research Council in January 2004. She spoke on "Space and Integration: Immigrants to DFW" in April 2004 at the Woodrow Wilson International Center for Scholars in Washington, D.C.

Jaimie Clark-Soles, Theology, received the Louisville Institute of Christian Faith and Life Sabbatical Grant, Catholic Biblical Association Post-Doctoral Fellowship, and a grant to the Wabash Center Workshop on Teaching and Learning for Theological School Faculty.

Clements Center for Southwest Studies was the subject of the summer 2004 issue of the *Journal of the Southwest*, published at the University of Arizona, featuring essays by seven of its former fellows.

Alessandra Comini, Art History, has written *In Passionate Pursuit: A Memoir* (George Braziller, 2004), about her six decades as an art historian.

Anthony Cortese, Sociology, received the highest rating – Essential – from *CHOICE: Current Reviews for Academic Libraries* for *Provocateur: Images of Women and Minorities in Advertising* (2nd ed., Rowman & Littlefield, 2004). He also received the 2004 Critics' Choice award from the American Educational Studies Association for his book *Walls and Bridges: Social Justice and Public Policy* (State University of New York Press, 2004).

Gail Daly, Underwood Law Library, has been appointed by President George W. Bush to serve on the National Museum and Library Services Board, which advises the Institute of Museum and Library Services, a federal agency that allocates more than $200 million in grants to the nation's museums and libraries.

Joe Downing, Corporate Communications and Public Affairs, published an article on American Airlines' use of mediated employee channels after the September 11, 2001, attacks in *Public Relations Review* 30 (1).

David Epstein, Law, received the 2004 Lawrence P. King Award for excellence in the field of bankruptcy from the Bankruptcy Section of the Commercial Law League of America.

Robert Frank, Composition/Theory, and **Simon Sargon**, Composition, received 2004-05 ASCAP Plus Awards based upon the value of their original compositions and recent performances. Frank's orchestral work "Viva Vivaldi!", commissioned for the 2004 Viva Vivaldi International Festival of the Arts, Mexico City, premiered at the festival's opening concert in August.

Dennis Ippolito, Political Science; **Benjamin Johnson**, History; and **Kathleen A. Wellman**, History, received the 2004 Godbey Lecture Series Authors' Awards for books they published in 2003. Ippolito was honored for *Why Budgets Matter: Budget Policy in American Politics*; Johnson for *Revolution in Texas: How a Forgotten Rebellion and Its Bloody Suppression Turned Mexicans into Americans*; and Wellman for *Making Science Social: The Conferences of Theophraste Renaudot, 1633-1642*.

Bill Komodore, Art, completed 15 large works that were shown at the Gerald Peters Gallery in Dallas. Three works were shown at the Meadows Museum in the exhibition "Texas Visions, The Barrett Collection."

Tom Mayo, Law, was named a fellow of the American Health Lawyers Association.

Daniel Millimet, Economics, has been appointed to the editorial council for the *Journal of Environmental Economics & Management* for 2005-06.

Pauline T. Newton, English, was awarded the 2003-04 Sam Taylor Award, given to scholars focusing on works that enhance Texas. The award allowed her to interview Texas poet and author Jenny Boully.

Geoffrey Orsak, Electrical Engineering, was elected a fellow of the Institute of Electrical and Electronics Engineers (IEEE) for his leadership in developing curricula and technology for pre-college engineering education.

Pamela A. Patton, Art History, published *Pictorial Narrative in the Romanesque Cloister: Cloister Imagery and Religious Life in Medieval Spain* (Peter Lang, 2004).

Bill Schucany, Statistical Science, received the 2004 ASA Founders Award from the American Statistical Association.

David Weber, History, gave the annual Charles Edmondson Historical Lectures at Baylor in March 2004 and the annual Merrick-Travis Lecture at the University of Oklahoma in September 2004.

SMU | RESEARCH

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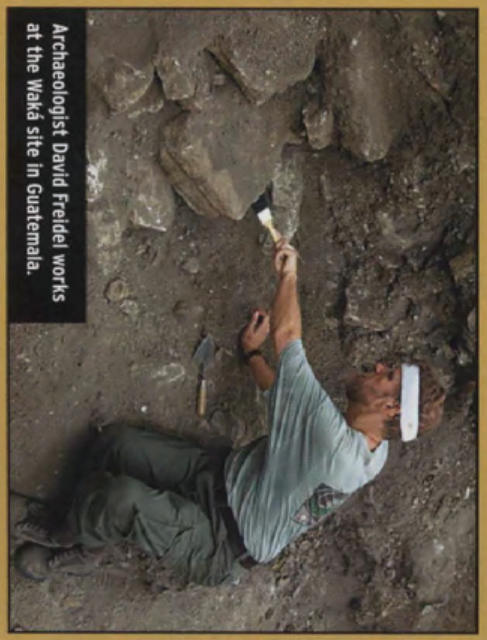

Archaeologist David Freidel works at the Waká site in Guatemala.